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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,718	07/25/2003	Hideo Miura	500.33045CC3	9680
20457	7590	11/12/2004		
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			EXAMINER TRAN, LONG K	
			ART UNIT 2818	PAPER NUMBER

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/626,718

Applicant(s)

MIURA ET AL.

Examiner

Long K. Tran

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-12 and 14 - 29 is/are pending in the application.
- 4a) Of the above claim(s) 14 - 29 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 9 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/25/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of **Group I**, claims **9 – 12** in the reply filed on September 20, 2004 is acknowledged. The traversal is on the ground(s) that "If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent invention." This is not found persuasive because: (A) according to MPEP 806.05 (f) (1) that the process as claimed can be use to make other and different product or by hand, or (2) that process as claimed can be made by another and different process. (MPEP § 806.05(f)). In the instance case unpatentabilities of the group I invention would not necessarily imply unpatentability of the group II invention, since the device of the group II invention could be made by the processes different from those of the group I invention, for example, in claim **9**, the limitations disclosed in group I invention are not disclosed in group II invention, for example, measuring a thickness of a pad oxide film, measuring an internal stress of nitride film, and measuring a depth of groove; (B) these inventions are distinct and have acquired a separate status in the art as shown by their different classification, the fields of search are not co-extensive, therefore, separate examination would be required.

Furthermore, there is no evidence of record that the search and examination of an entire application including two distinct embodiments (groups) can be made without serious burden for Examiner.

The requirement is still deemed proper and is therefore made FINAL.

***Information Disclosure Statement***

2. This office acknowledges of the following items from the Applicant:

Information Disclosure Statement (IDS) filed on July 25, 2003.

The references cited on the PTO -1449 form have been considered.

**This application is in condition for allowance except for the following formal matters:**

- i) Cancellation of claims **14 – 29**.
- ii) Claim Objections:

Claims **9** and **12** are objected to because of the following informalities:

**Claim 9:**

Line 5: change "measuring the width" to --measuring a width--;

Line 9: change "a nitride" to --said nitride--;

Line 10: change "said thickness" to -- said thickness of a pad oxide film,  
said thickness of a nitride film--;

Line 10: change " said width" to -- said width of a device formation region,  
said width of a device isolation region --;

Line 14: change "said stress" to --said internal stress and said internal  
estimated stress --

**Claim 12:**

Line 11: change "said thickness" to -- said thickness of a pad oxide film,  
said thickness of a nitride film--;

Line 11: change " said width" to -- said width of a device formation region,  
said width of a device isolation region --;

Lines 14 and 15: change "said stress" to --said internal stress and said  
internal estimated stress --

Appropriate correction is required.

***Allowable Subject Matter***

3. Claims **9 – 12** would be allowable.
4. The following is a statement of reasons for the indication of allowable subject matter: Claims **9 – 12** are allowable over the prior art of record because none of the prior art whether taken singularly or in combination, especially when these limitations are considered within the specific combination claimed, to teach:

a step of measuring an internal stress, conducting stress; a step of conducting stress analysis using thickness, width of a device formation region, width of device isolation region, depth of groove and internal stress; a step of preparing a stress distribution chart representing a region by using the width of the device deformation region and the width of the device isolation region as parameters; and among other limitations as cited in the independent claims **9** and **12**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.


A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.


When responding to the office action, Applicants' are advice to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long K. Tran whose telephone number is 571-272-1797. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306..

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Long Tran   
November 1, 2004

  
David Nelms  
Supervisory Patent Examiner  
Technology Center 2800